

Claims

1. A portable wireless apparatus comprising:
  - a first casing including a front case on the side having
  - 5 a main display, a back case on the opposite side of the front case, and a first circuit board;
  - a second casing including a front case on the side having an input unit, a back case on the opposite side of the front case, and a second circuit board;
- 10 a circuit board connector for electrically connecting the first circuit board and the second circuit board;
- a hinge having the circuit board connector for connecting the first casing and the second casing in a foldable manner;
- 15 an antenna connected to the hinge side of the second circuit board;
- a first parasitic element configured in the front case and made longer than the electrical length of the antenna; and
- a second parasitic element configured in the back case and made shorter than the electrical length of the antenna.

- 20 2. The portable wireless apparatus of Claim 1, wherein the length of the first parasitic element is larger than one half wavelength of a predetermined frequency band; and
- 25 wherein the length of the second parasitic element is smaller than one half wavelength of a predetermined frequency

band.

3. The portable wireless apparatus of Claim 1,  
wherein the first parasitic element is disposed in the  
front case of the first casing; and

5 wherein the second parasitic element is disposed in the  
back case of the first casing.

4. The portable wireless apparatus of Claim 1,  
wherein the first parasitic element and the second  
parasitic element are disposed at the positions of the first  
10 casing, in which they are opposed to each other.

5. The portable wireless apparatus of Claim 1,  
wherein the first parasitic element is configured by  
plating the first casing; and  
wherein the second parasitic element is configured by  
15 plating the second casing.

6. The portable wireless apparatus of Claim 1,  
wherein the first parasitic element is configured by  
fixing a metal sheet on the case of the first casing; and  
wherein the second parasitic element is configured by  
20 fixing a metal sheet on the case of the second casing.

7. The portable wireless apparatus of Claim 1,  
wherein at least either the first parasitic element or  
the second parasitic element is formed generally into a shape  
of letter substantially "U" according to the shape of the first  
25 casing or the second casing.

8. The portable wireless apparatus of Claim 1, further comprising:

      a third parasitic element disposed in the front case of the second casing;

5      a fourth parasitic element disposed in the back case of the second casing;

      a first connector for electrically connecting the first parasitic element and the third parasitic element; and

10    a second connector for electrically connecting the second parasitic element and the fourth parasitic element,

      wherein the first connector and the second connector are individually threaded in the hinge.

9. The portable wireless apparatus of Claim 8,

      wherein the first parasitic element and the second 15 parasitic element match a first predetermined frequency band; and

      wherein the third parasitic element and the fourth parasitic element match a second predetermined frequency band.